

Work Order ID: 93193

November-15-12 9:19:48 AM

\*93193\*

Page 1

Item ID: D4151-041

Accept

\*N900040100\*

Setup Start \*NS1\*

Revision ID:

Stop \*NS2\*

Item Name: Basket Fwd Hardpoint Assembly, Lower

Start Date: 11/19/12 Start Qty: 2.00

\*2\*

Cust Item ID:

Required Date: 11/30/12 Req'd Qty: 2.00

\*2\*

Customer:

Reference:

Approvals: Process Plan: MLJ

Date: 12-11-16 Tooling:

Date:

Run Start \*NR1\*

QC:

Date: SPC (Y/N):

Date:

Stop \*NR2\*

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
Draw Nbr	Revision Nbr								
D4151	C								
100		0.00							
*100*									
Small Fab	Memo	0.00							
Small Fab	1- Assemble as per dwg								
110	QC5- Inspect part completeness to step on W/O	0.00							
*110*									
QC	Memo	0.00							
Quality Control									
120	Identify as per dwg & Stock Location: 57/106	0.00							
*120*									
Packaging	Memo	0.00							
Packaging									

2x

12/12/07

DAS 15 12/12/07

2

12/12/07

**Work Order ID 93193**

November-15-12 9:19:48 AM

**\*93193\***

Page 2

Item ID: D4151-041

Accept

**\*N900040100\***Setup Start **\*NS1\***

Revision ID:

Stop **\*NS2\***

Item Name: Basket Fwd Hardpoint Assembly, Lower

Start Date: 11/19/12 Start Qty: 2.00 **\*2\***

Cust Item ID:

Required Date: 11/30/12 Req'd Qty: 2.00 **\*2\***

Customer:

Reference:

Approvals: Process Plan: \_\_\_\_\_ Date: \_\_\_\_\_ Tooling: \_\_\_\_\_ Date: \_\_\_\_\_

Run Start **\*NR1\***

QC: \_\_\_\_\_ Date: \_\_\_\_\_ SPC (Y/N): \_\_\_\_\_ Date: \_\_\_\_\_

Stop **\*NR2\***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
--------------------------------	--------------------------	----------------------	---------	--------	--------------	---------------	---------------	------------------	----------------

130

QC21- Final Inspection - Work Order Release

0.00

**\*130\***

QC

Memo

0.00

Quality Control

12/12/10 *[Signature]*  
ME  
12-12-09

# Picklist Print

November-15-12 9:19:48 AM

Page 1

Work Order ID: 93193

Parent Item: D4151-041

Parent Item Name: Basket Fwd Hardpoint Assembly, Lower

Start Date: 11/19/12

Required Date: 11/30/12

Start Qty: 2.00

Required Qty: 2.00

Comments: IPP Rev:A 10.06.24 new issue DD verf:EC  
IPP Rev:B 10.07.22 as per revB DD verf:JLM  
revC DD verf:JLM

IPP Rev:C 11.01.21 as per dwg

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
D4151-1 Lower Hardpoint Plate		Manufactured	No			100	Each	0.0000	2	4		12/12/07	
D4151-5 Fwd Basket Instl Stud		Manufactured	No			100	Each	10.0000	1	2		12/12/07	
				<u>Location</u>		<u>Loc Qty</u>		<u>Loc Code</u>					
				ST145		10							
				90138		10							
AN4G13A BOLT		Purchased	No			100	Each	39.0000	2	4		12/12/07	
				<u>Location</u>		<u>Loc Qty</u>		<u>Loc Code</u>					
				ST356		32							
				122808		32							
				ST357		7							
				121827		3							
				122141		4							

# Picklist Print

November-15-12 9:19:48 AM

Page 2

Work Order ID: 93193

Parent Item: D4151-041

Parent Item Name: Basket Fwd Hardpoint Assembly, Lower

Start Date: 11/19/12

Required Date: 11/30/12

Start Qty: 2.00

Required Qty: 2.00

**NAS21043-4**

Nut

Purchased No

100 Each 1,461.0000 2

4

*PS 12/12/07*

Location

Loc Qty

Loc Code

FG	36
104603	36
ST301	269
119546	2
121162	25
121652	242
ST314	500
123525	500
ST315	500
123021	500
ST318	156
122141	156

4

**NAS1149G0432R**

Washer

Purchased No

100 Each 4,052.0000 4

8

*PS 12/12/07*

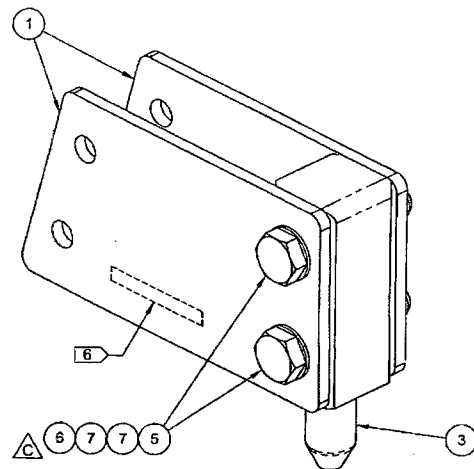
Location

Loc Qty

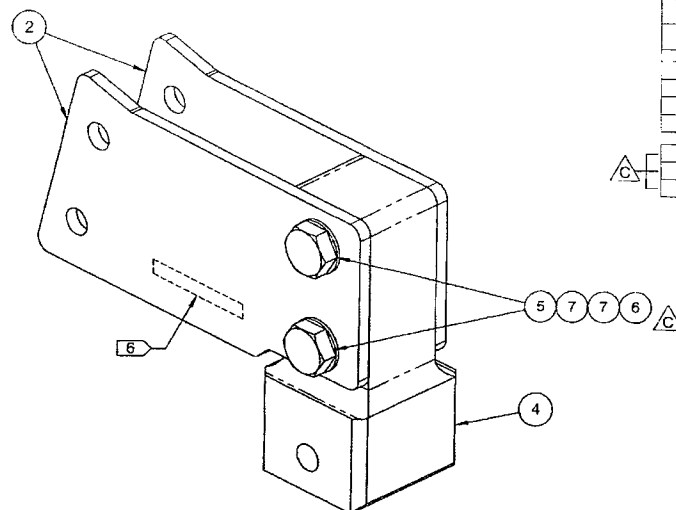
Loc Code

296	3000
122441	3000
ST297	914
117291	40
119124	874
ST298	138
121255	138

8



**D4151-041 BASKET FWD HARDPOINT ASSY (LOWER)**



**D4151-043 BASKET FWD HARDPOINT ASSY (UPPER)**

ITEM	QTY -041	QTY -043	P/N	DESCRIPTION
	X		D4151-041	BASKET FWD HARDPOINT ASSY (LOWER)
		X	D4151-043	BASKET FWD HARDPOINT ASSY (UPPER)
1	2		D4151-1	LOWER HARDPOINT PLATE
2		2	D4151-3	UPPER HARDPOINT PLATE
3	1		D4151-5	FWD BASKET INSTL STUD (LOWER)
4		1	D4151-7	FWD EYEBOLT RECEIVER (UPPER)
5	2	2	AN4C13A	BOLT
6	2	2	MS21043-4	NUT
7	4	4	NAS1149C0432R	WASHER

UNCON  
SUB

93193 MCT  
12-11-18

RELEASED  
2011-01-18

C	AN4 HARDWARE WAS AN3 (B6-1, C3-1 & D3-1); $\phi 0.252$ WAS $\phi 0.191$ (C5-2, D1-2); TIGHTENED TOL ON 1.000 DIM (C5-2, D1-2, C7-3, C9-3); $\phi 0.250$ WAS $\phi 0.191$ (C6-3, B4-3); 1.83 WAS 1.75 (C1-2); 2.84 WAS 2.78 (B3-3) AND 1.88 WAS 1.80 (C1-3) TO PRESERVE 1.5SD. REASON: SEE D407-797 DESIGN JOURNAL.	MB	10.12.14
B	ADDED D4151-5/7 (SHT 3); D4151-5 WAS D3911-1 (ZN B6-1 & D3-1); D4151-7 WAS D3911-3 (ZN C4-1 & D3-1) ITEMS #5, 6 & 7 REPLACE MS20615-4M20 (ZN C3-1, D3-1 & B6-1); $\phi 0.191$ 2 PL REPLACES $\phi 0.129$ 3 PL (ZN C5-2); $\phi 0.191$ 2 PL REPLACES $\phi 0.129$ 4 PL (ZN D1-2). REASON: SEE TR-D350-607-2 REV. B.	MB	10.07.05
A	NEW ISSUE	MB	10.06.22
REV.	DESCRIPTION	BY	DATE
DESIGN			
DRAWN			
CHECKED	SC		
MFG. APPR.			
APPROVED			
DE APPR.			
DATE	10.12.14		

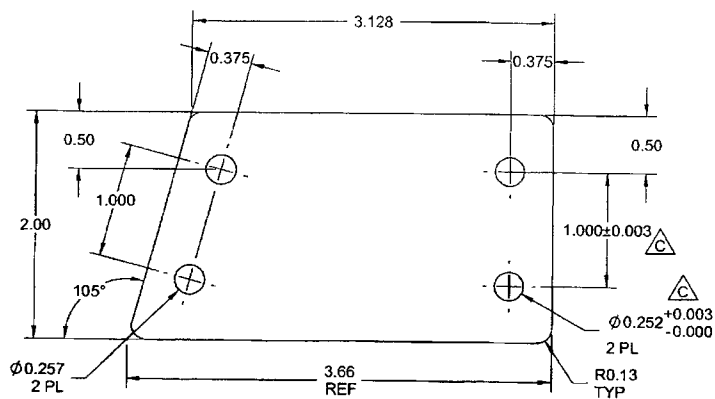
- NOTES:
- 1) MATERIAL: N/A
  - 2) FINISH: NONE
  - 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
  - 4) UNITS: INCHES UNLESS OTHERWISE NOTED
  - 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
  - 6) IDENTIFICATION: IDENTIFY WITH DART P/N "D4151-04X" USING FINE POINT PERMANENT INK MARKER
  - 7) WEIGHT:
    - D4151-041 = 0.88 lbs
    - D4151-043 = 1.17 lbs

**DART AEROSPACE LTD**  
HAWKESBURY, ONTARIO, CANADA

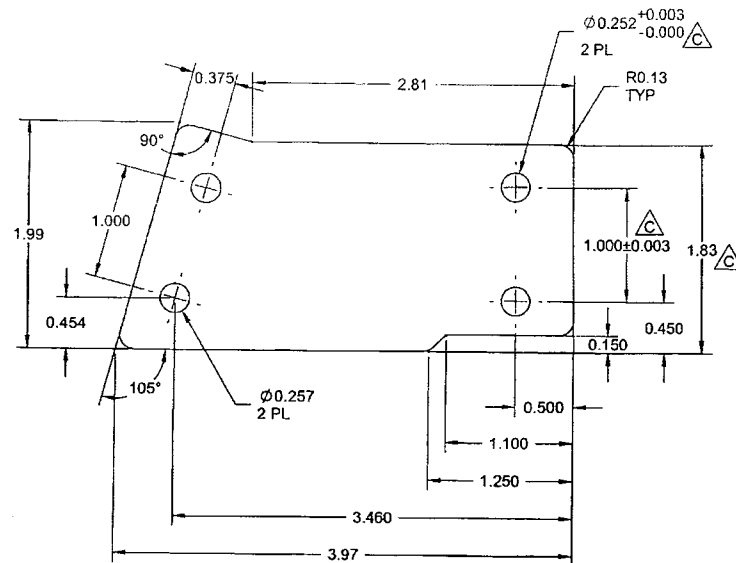
DRAWING NO. **D4151** REV. C  
SHEET 1 OF 3  
TITLE **BASKET FWD HARDPOINT** SCALE NTS

COPYRIGHT © 2010 BY DART AEROSPACE LTD  
THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR REPRODUCED IN ANY FORM OR BY ANY MEANS WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.

93193



0.125 REF  
**D4151-1 LOWER HARDPOINT PLATE**



0.125 REF  
**D4151-3 UPPER HARDPOINT PLATE**

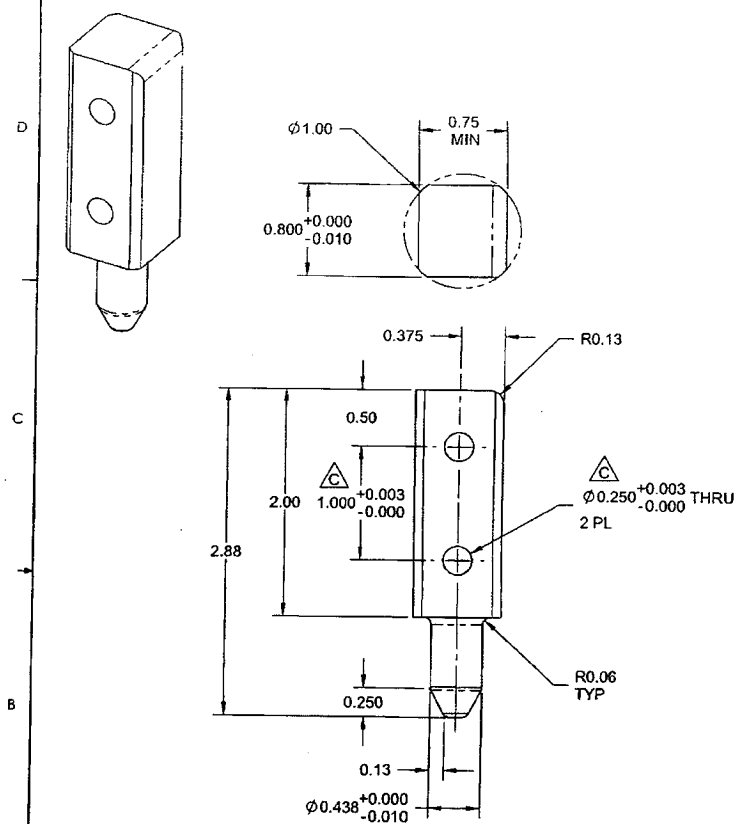
**NOTES:**

- 1) MATERIAL: 303/304/316 STAINLESS STEEL SHEET ANNEALED 2B, 0.125 THK  
PER MIL-S-5059 OR AMS 5513/5524 OR ASTM A240 OR ASME SA240  
REF. DART SPEC. M304S11GA OR M303S11GA
- 2) FINISH: NONE
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: IDENTIFY AT ASSEMBLY
- 7) WEIGHT:  
- D4151-1 = 0.24 lbs  
- D4151-3 = 0.23 lbs

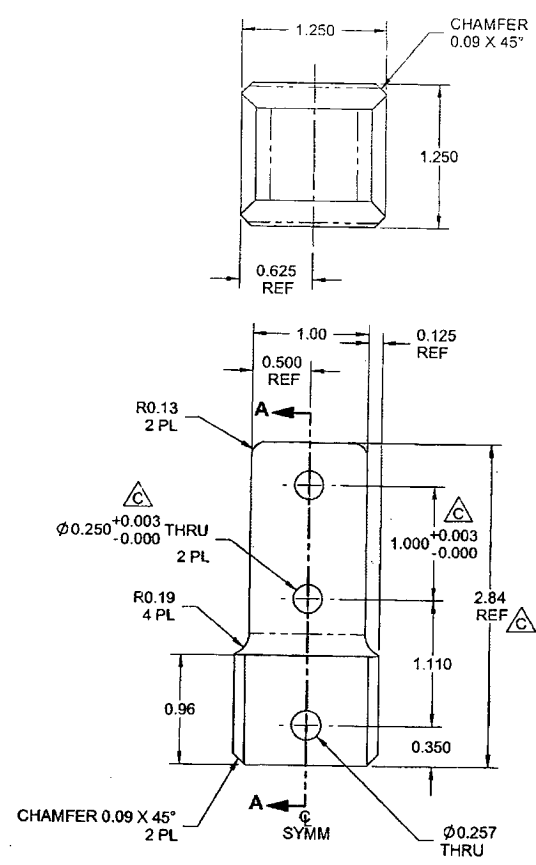
**RELEASED**  
R 2011-01-18  
JMD

DESIGN		<b>DART AEROSPACE LTD</b>	
DRAWN		HAWKESBURY, ONTARIO, CANADA	
CHECKED	SC	DRAWING NO.	REV. C
MFG. APPR.		D4151	SHEET 2 OF 3
APPROVED	NT	TITLE	SCALE
DE APPR.		<b>BASKET FWD HARDPOINT</b>	NT
DATE	10.12.14	COPYRIGHT © 2010 BY DART AEROSPACE LTD	
THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.			

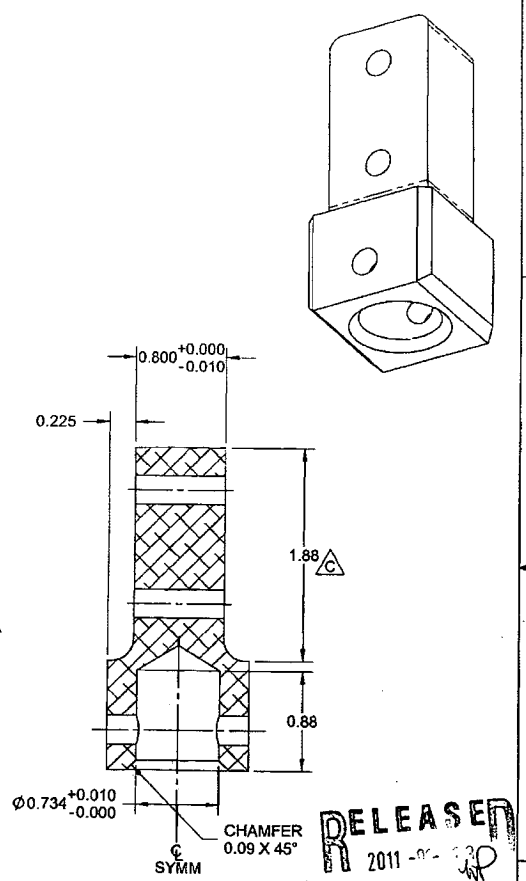
93193



**D4151-5 FWD BASKET INSTL STUD (LOWER)**




**D4151-7 FWD EYEBOLT RECEIVER (UPPER)**



**SECTION A-A**

- NOTES:**
- 1) MATERIAL -5: 303/304/316 STAINLESS STEEL ROUND BAR, PER ASTM A276 OR ASTM A582  
PER DART SPEC M303R OR M304R
  - 7: 303/304/316 STAINLESS STEEL BAR, PER ASTM A276 OR ASTM A582  
PER DART SPEC M303B OR M304B
  - 2) FINISH: NONE
  - 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
  - 4) UNITS: INCHES UNLESS OTHERWISE NOTED
  - 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
  - 6) IDENTIFICATION: IDENTIFY AT ASSEMBLY
  - 7) WEIGHT -5: 0.36 lbs  
-7: 0.70 lbs

DESIGN		<b>DART AEROSPACE LTD</b>	
DRAWN		HAWKESBURY, ONTARIO, CANADA	
CHECKED		DRAWING NO.	REV. C
MFG. APPR.		<b>D4151</b>	SHEET 3 OF 3
APPROVED		TITLE	SCALE
DE APPR.		<b>BASKET FWD HARDPOINT</b>	NTS
DATE	10.12.14	COPYRIGHT © 2010 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR DISCLOSED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.	

**RELEASED**  
2011-01-30  
**RELEASED**